Washington County Job Description



Title:	Systems Administrator		
Division:	Administration	Effective Date:	07/08
Department:	Information Technology	Last Revised:	4/18
Career Service: Eligible		FLSA:	Exempt

GENERAL PURPOSE

Performs a variety of **administrative**, **managerial and technical duties** related to planning, organizing, and coordinating the day-to-day development, implementation and maintenance of the county computer system infrastructure and data processing functions.

SUPERVISION RECEIVED

Works under the general supervision of the Information Technology Director.

SUPERVISION EXERCISED

None

ESSENTIAL FUNCTIONS

Performs ongoing system analysis and planning; oversees day-to-day processes and operations as needed to ensure effective and efficient installation, operation and maintenance of county computer system infrastructure, including operating system and application configuration; coordinates with network manager on network design, firewall zones/policies, VLAN assignment, IP space allocations, WAN/VPN connectivity, domain assignments and various system components.

Coordinates and manages various resources of the IT systems, including, hardware configuration and space allocations and CPU time; coordinates various aspects of the system with other IT staff; establishes target dates, time lines, system performance standards and general quality expectations on a project-by-project basis; performs quality checks as needed.

Conducts ongoing research of system hardware and software needs; assess products best able to meet system needs; negotiates with vendors to secure competitive pricing; initiates purchase orders as needed; resolves transaction issues.

Administers internet domains owned by the county; maintains, updates, and administers various county servers and applications; installs and configures Windows and Linux server operating systems; setup install, and trouble shoots server hardware.

Provides advanced technical back-up for IT staff as needed; provides on-demand, help-desk technical assistance to all users in all county departments; identifies, researches, resolves technical problems and communicates resolutions to all employees; answers inquiries in-person concerning use of hardware and software, including, computers, printers, word processors, spreadsheets, phones, faxes, printers, scanners, copiers, internet, email and operating systems; conducts training as needed on county software and hardware.

<u>Programming:</u> Performs various custom programming for system projects and web applications requiring scripting and coding. Assists with web projects as needed.

<u>Disaster Recovery</u>: Manages the development and maintenance of systems integrity; Manages the development and maintenance of backup and recovery procedures to assure system protection in the event of hardware/software failure and preserve digital records; plans and schedules rotation of backup media; assures privacy and security for systems software and database; documents procedures and trains county personnel to respond to emergencies as needed; designs and sets up security systems, including passwords, log-ins, and various levels of the same.

Evaluates and recommends hardware and software acquisitions; evaluates and monitors system capacity; predicts and estimates hardware and software performance for current and future operations volume; assures hardware and software capability to continually handle changing information and storage requirements; provides recommendations for improving operational efficiency throughout the county.

<u>Server Administration</u>: Manages and performs maintenance and coordinates acquisition of system servers; assemble, upgrade and install server stations; recommends upgrades, patches and new applications and equipment; manages data center operations including climate control, power, security, hardware and software; assess changing technology to determine impact upon existing systems; monitors daily operation;

Install, maintain, manage and support the following:

Storage Arrays and SAN switching

VMWare / VSphere

Server Blades and Enclosures

Active Directory

Samba

<u>Database Administration</u>: Performs database administration for Oracle, MSSQL, Postgres; designs organizational data definitions and standards; assist in the development and review of logical database file designs; provides for adequate privacy and security for database and establish recovery procedures; monitors and measures database usage statistics; recommends changes for non-performing applications.

Performs related duties as required.

MINIMUM QUALIFICATIONS

- 1. Education and Experience:
 - A. Graduation from college with a bachelor's degree in Systems Administration, Management Information Systems or related field:

AND

B. Eight (8) years of progressively responsible experience in computer operations, or IT systems administration;

OR

- C. An equivalent combination of education and experience.
- 2. Required Knowledge, Skills, and Abilities:

Considerable knowledge of syntax and grammar of various scripting languages and processes (PHP, Bash, JavaScript); computer languages; system design concepts; computer mainframe networking; budgeting; information system management concepts; hardware configurations and capabilities; operating system fundamentals; data communication concepts; documentation procedures.

Ability to manage complex computer system operations; recognize and solve problems related to data entry and retrieval; communicate technical information effectively, verbally and in writing; perform mechanical duties related to installation of printers, hardware and related items; develop effective working relationships.

Special Qualifications:

Must work extended daily hours and weekends as needed to maintain computer operations.

4. Work Environment:

Daily performance of duties require climbing, stooping, lifting, and crawling. Duties are generally performed indoors and outdoors, sometimes duties are performed in dusty, dirty, confined and high spaces. Some travel may be required. Mental application required emotional stability in dealing with time deadlines and stresses of emergency response needs.

<u>Disclaimer</u>: The above statements describe the general nature, level, and type of work performed by the incumbent(s) assigned to this classification. They are not intended to be an exhaustive list of all responsibilities, demands, and skills required of personnel so classified. Job descriptions are not intended to and do not imply or create any employment, compensation, or contract rights to any person or persons. Management reserves the right to add, delete, or modify any and/or all provisions of this description at any time as needed without notice. This job description supersedes earlier versions.

	have reviewed the above job description.	Date:
(Employee)	· '	